

FILTER ASSEMBLY, FILTER ELEMENT, AND METHOD OF UTILIZING THE SAME

ABSTRACT OF THE DISCLOSURE

5 A filter assembly and a method of filtering a fluid using the filter assembly are disclosed. The filter assembly includes wave coils arranged axially to define a filter element. The filter element includes bottom and top ends and an inner cavity. The filter assembly also includes a base plate that engages one, or both, ends to support the wave coils. The fluid flows toward the base plate, and the base plate diverts the fluid inside or outside the inner cavity. The wave coils include crests and troughs engaging one another on adjacent wave coils to define filtration apertures. The diverted fluid is filtered through the filtration apertures such that a filtrate of the fluid passes through the inside or outside of the inner cavity, and a retentate of the fluid is retained on the other of the inside or outside of the inner cavity relative to the filtrate.

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